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[54] METHODS AND APPARATUS FOR CONNECTING CLOSELY SPACED LARGE CONDUCTOR ARRAYS EMPLOYING MULTI-CONDUCTOR CARRIER BOARDS

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[58] Field of Search 339/17 M, 17 LM, 17 CF, 339/17 N; 361/393-395, 398, 399, 412, 413,

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[56] References Cited

U.S. PATENT DOCUMENTS

 4,121,135
 10/1978
 Hunt et al.
 339/17 M

 4,533,976
 8/1985
 Suwa
 339/17 M

OTHER PUBLICATIONS

IBM Bulletin, Braslav, vol. 20, No. 11A, p. 4655, 4-1978.

IBM Bulletin, Fedrowitz et al, vol. 20, No. 12, p. 5172, 5-1978.

ABSTRACT

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Apparatus is disclosed for connecting to a plurality of closely spaced lines located on a display panel. The panel is positioned in a base plate assembly which serves as a frame for the panel. The base assembly has a plurality of first and second locating pins arranged along a side of the panel with a set of pins positioned with respect to an aperture on said base assembly. A plurality of carrier boards are employed to connect to the closely spaced lines, wherein each board is positioned between associated pins and overlies the aperture. When in this position, contact areas on the underside of the board are forced to contact signal lines which underlie the aperture by means of a conductive coupling strip positioned in each aperture. The top of the carrier board contains output conductors which are connected to the display lines by means of another conductive strip located on the top of the carrier boards and directed through a channel.

20 Claims, 7 Drawing Figures

